Germany, acting as the European Union rapporteur member state (RMS) submitted their glyphosate renewal assessment report (RAR) to the European Food Safety Authority (EFSA) in January 2014, recommending re-approval of glyphosate for use in Europe with increase in the acceptable daily intake (ADI) from 0.3 to 0.5 mg per kg body weight per day [1].

Announcement of RAR finalized on BfR website: http://www.bfr.bund.de/en/the_bfr_has_finalised_its_draft_report_for_the_re_evaluation_of_glyphosate-188632.html

"Germany is the reference Member State that is responsible for the re-evaluation of glyphosate and their current findings contradict these reports.

http://www.independent.com.mt/articles/2015-04-11/local-news/Carcinogenic-weed-killer-Malta-will-await-new-EU-legislation-before-banning-herbicide-use-6736133629

According to AllGov,

<u>Canada</u>, Brazil, <u>Sri Lanka</u> and the Netherlands have or will soon impose restrictions or bans on glyphosate, the main ingredient in Monsanto's Roundup weed killer, the most heavily used pesticide in the United States. [4]

France Poised to Ban Roundup and Follow Netherlands' Lead

Word on the street from Healthy Home Economist readers in Europe indicates that garden centers in France have already pulled Roundup from the shelves and that it can no longer be purchased. Inquiries to sales clerks at multiple garden centers in France verifies that Roundup will no longer be sold to private individuals. It appears that a strong push by French environmental groups to ban glyphosate may indeed have succeeded.

Brazil Top Prosecutor Requests to Ban Roundup Late last month, the Brazilian Public Prosecutor in the Federal District requested that the Justice Department suspend the use of glyphosate, the most widely used herbicide in that country. If approved, a Brazilian glyphosate ban would constitute another crushing blow to the biotech industry. Only weeks ago, Brazil's Federal Appeals Court unanimously decided to cancel the release of Bayer's Liberty Link GM (genetically modified) Maize for cultivation.

- See more at: http://www.thehealthyhomeeconomist.com/roundup-banned-netherlands-france-brazil-likely-soon-follow/#sthash.vyb6DxKK.dpuf

Richmond's (British Columbia) anti-pesticide prohibition applies to residential and city property, but excludes industries like farms, golf courses, and indoor extermination that use the very same ingredients as professional lawn care companies, as well as individual homeowners.

Although the use of pest control products is banned for so-called cosmetic reasons in Richmond, local retailers are still permitted to sell the chemicals.

Read more:

http://www.icangarden.com/document.cfm?task=viewdetail&itemid=9770#ixzz3YWF3ywmS

The

British Columbia government is currently considering banning the sale and use of synthetic pesticides for cosmetic uses (Shore, 2011). Similar policies have been adopted in other provinces: Quebec in 2002, Ontario in 2008, Nova Scotia in 2010, and Prince Edward Island in 2010 (MDDEP, 2002; MEO, 2011; NSE, 2010; DEEF, 2010). For example, Ontario has restricted the sale and use of over 250 pesticide products and 80 pesticide ingredients (Government of Ontario, 2009). New Brunswick has taken a less extreme approach and does not have a specific ban on the cosmetic use of synthetic pesticides, but instead has enacted a myriad of laws and regulations that make cosmetic pesticide use burdensome (Government of New Brunswick, 2011). These provincial prohibitions on cosmetic use of synthetic pesticides may apply to lawns, vegetable and ornamental gardens, driveways, cemeteries, public parks, and school grounds. Similarly, controls and bans on cosmetic pesticide use have been implemented municipally in dozens of cities across Canada as well.1

The justification for a ban on the cosmetic use of synthetic pesticides is mainly based on a possible link that between synthetic pesticide exposure and the risk of developing cancer.

Department of Energy, Environment and Forestry [DEEF] (2010). Restrictions on Lawn Pesticides. Government of Prince Edward Island.

http://www.gov.pe.ca/envengfor/index.php3?number=1030236&lang=E, as of July 26, 2011.

Ministere Developpement durable, Environment et Parcs [MDDEP] (2002). The Pesticides Management Code. Government of Quebec. http://www.mddep.gouv.qc.ca/pesticides/ permis-en/code-gestion-en/index.htm>, as of July 26, 2011.

Ministry of the Environment, Ontario [MEO] (2011). Pesticides. http://www.ene.gov.on.ca/environment/en/category/ pesticides/index.htm>, as of July 26, 2011.

Nova Scotia Environment [NSE] (2010). Environment: Lawns and Ornamental Gardens - Non-essential Pesticides. Government of Nova Scotia. http://www.gov.ns.ca/nse/pests/ non-essential.pesticides.asp>, as of July 26, 2011.

Shore, Randy (2011, July 6). Province Eyes Ban on Use of Cosmetic Pesticides at Home. Vancouver Sun. http://www.vancouversun.com/health/Province+eyes+cosmetic+pesticides+home/5056658/story.html, as of July 26, 2011.

Cosmetic pesticides

Current state of cosmetic pesticide policy in Canada

The first cosmetic pesticide ban was implemented in Hudson, Quebec in 1991 at the urging of Dr. June Irwin, a local dermatologist, who noticed a connection between her patients' health conditions and their exposure to pesticides. Since then, over 170 Canadian communities and seven provinces have implemented some form of cosmetic pesticide policy, including:

Quebec (2003)

New Brunswick (2009)

Ontario (2009)

Alberta (2010)

PEI (2010)

Nova Scotia (2011)

Newfoundland and Labrador (2012)

Of the seven provinces only Ontario and Nova Scotia have legislation that is considered sufficiently strong to significantly reduce cosmetic pesticide exposure.

Learn more

 $\label{lem:read} \textbf{Read more:} \ \underline{\text{http://www.cancer.ca/en/get-involved/take-action/what-we-are-doing/cosmetic-pesticides-ab/?region=ab\#ixzz3YWWBlwiY}$

Manitoba is the sixth province to prohibit the cosmetic use of certain pesticides.

The restriction starts in 2015, but will not include spraying golf courses and would not stop someone from buying pesticides outside the province and bringing them back to Manitoba.

Under the ban, which would take effect in December 2014 but allow for a one-year grace period, synthetic, chemical lawn pesticides would not be allowed on lawns, driveways, sidewalks, patios, school grounds, playing fields and playgrounds.

http://www.cbc.ca/news/canada/manitoba/manitoba-weeds-out-cosmetic-pesticides-in-new-legislation-1.2617260

www.intechopen.com: Herbicides – Properties, Synthesis and Control of Weeds p. 248
This market success has been limited significantly neither by the recognition of the water-polluting feature of the parent compound, nor by the emerging weed resistance worldwide.

glyphosate acts by inhibiting aromatic amino acid biosynthesis in plants the responsible mechanism is blocking a key step in the so-called shikimate pathway (Herman & Weaver, 1999), responsible for the synthesis of aromatic amino acids and critical plant metabolites

This metabolic pathway exists in plants, fungi, and bacteria, but not

in animals (Kishore & Shah 1988). Although higher order living organisms lack this metabolic route, therefore, are not expected to be directly affected by this herbicide

A limited "public health" exemption allows for the use of certain banned pesticides on poisonous plants.

• Cosmetic pesticides containing the active ingredients Glyphosate and Glufosinate, found in Roundup and Wipeout herbicides, are generally prohibited, but can be used to control plants that are poisonous to the touch (e.g. poison ivy). These pesticides can be sold but new restrictions on the retail display of "dual use" products apply. Lawn care companies that use pesticides under this exemption will be required to post warning signs.

http://www.davidsuzuki.org/issues/health/science/pesticides/highlights-of-ontarios-cosmetic-pesticideban/

Safety Evaluation and Risk Assessment of the Herbicide Roundup1 and Its Active Ingredient, Glyphosate, for Humans Gary M. Williams,* Robert Kroes,† and Ian C. Munro‡,2

Glyphosate (Fig. 1) is a nonselective herbicide that inhibits plant growth through interference with the production of essential aromatic amino acids by inhibition of the enzyme enolpyruvylshikimate phosphate synthase, which is responsible for the biosynthesis of chorismate, an intermediate in phenylalanine, tyrosine, and tryptophan biosynthesis (Fig. 2). This pathway for biosynthesis of aromatic amino acids is not shared by members of the animal kingdom, making blockage of this pathway an effective inhibitor of amino acid biosynthesis exclusive to plants

Glyphosate and Roundup herbicide have been extensively investigated for the potential to produce adverse health effects in humans. Government regulatory agencies in several countries, international organizations, and other scientific institutions and experts have reviewed the available scientific data and independently judged the safety of glyphosate and Roundup.

Conclusions from three major health organizations [Health Canada, United States Environmental Protection Agency (U.S. EPA), and World Health Organization (WHO)] are publicly available (Health and Welfare Canada, 1986, 1992; U.S. EPA, 1993, 1997a, 1998a; WHO, 1994a). Those reviews, which have applied internationally accepted methods, principles, and procedures in toxicology, have discovered no grounds to suggest concern for human health. Data on Roundup and glyphosate are constantly reevaluated by regulatory agencies in a science-based process for many reasons including its volume of production and new uses. Nevertheless, questions regarding its safety are periodically raised.

"Glyphosate and herbicide formulation containing glyphosate have a very low oral and dermal acute toxicity"

WORLD HEALTH ORGANIZATION, WHO/PCS/DS/96.91, July 1996, WHO/FAO DATA SHEETS ON PESTICIDES, No. 91, GLYPHOSATE

WHO. Data Sheets on Pesticides: Glyphosate; International Programme on Chemical Safety, World Health Organization, Food and Agriculture Organization: Geneva, Switzerland, 1996.

Currently, glyphosate is subject to routine reassessment within the framework of the EU evaluation of active substances according to Regulation (EC) No. 1107/2009 (Anonym 2009). Germany, acting in the European Union (EU) as Rapporteur Member State (RMS) for glyphosate, has submitted its draft of the "Renewal Assessment Report" (RAR) to the European Food Safety Authority (EFSA) in January 2014. Preparing the health chapter of this RAR, the Federal Institute for Risk Assessment (BfR) reviewed more than 150 new toxicological studies. Nearly 300 studies that had been already used for the previous evaluation (European Commission 2002) were reassessed. In addition, over 900 studies published in scientific journals were taken into consideration. This comprehensive draft report (EFSA 2014) was reviewed by all Member States of the EU and made available for public consultation.

Niemann L, Sieke C, Pfeil R, Solecki R. 2015. A critical review of glyphosate findings in human urine samples and comparison with the exposure of operators and consumers. Journal für Verbraucherschutz und Lebensmittelsicherheit 10: 3-12.

REUTERS Markets | Sat Mar 15, 2014 9:11am EDT Related: STOCKS, REGULATORY NEWS, MARKETS, BASIC MATERIALS Edition: US

France bans Monsanto GM maize ahead of sowing season

France's agriculture ministry on Saturday banned the sale, use and cultivation of Monsanto's MON 810 genetically modified maize, the only variety currently authorised in the European Union.

The French government, which maintains that GM crops present environmental risks, has been trying to institute a new ban on GM maize (corn) after its highest court has twice previously struck down similar measures.

http://www.reuters.com/article/2014/03/15/france-monsanto-idUSL6N0MC0BR20140315

Only one GM crop is currently grown in Europe: Monsanto's maize MON810 in Spain and Portugal. However, there are 58 GM crops approved for use in feed and food in the EU, the Commission said. In practice, there are hardly any GM products on sale for human consumption, but some 60 per cent of the EU's needs of vegetable proteins for cattle are met by imported soy and soymeal from countries where GM cultivation is widespread.

Sunday, April 26, 2015, 00:01 by Philip Blenkinsop, Reuters

EU proposes GM opt-out for members

 $\frac{\text{http://www.timesofmalta.com/articles/view/20150426/food-drink/eu-proposes-gm-opt-out-formembers.}{565817}$

Health Canada Proposes Updated Labelling of Pest Control Products Containing Glyphosate Posting date:April 13, 2015Type of communication:Information Update Today, Health Canada launched a public consultation process on its proposed re-evaluation decision of pest control products containing glyphosate. Glyphosate (well-known as Roundup™ and Vision™) is

widely used in Canada for weed management in agriculture, non-agriculture and forestry settings.

The proposed decision is to continue the registration of these products, but also calls for updates to

product labels to provide Canadians with additional guidance on how to use these products safely both to protect human health and the environment.

The proposed new labels for products that contain glyphosate would include:

A requirement for a statement indicating to apply only when the potential for drift to residential or populated areas is minimal. This includes houses, cottages, schools and recreational areas; A restricted entry interval (REI) of 12 hours for agricultural uses to better protect agricultural workers; New environmental hazard statements to inform users that, at high enough doses, it can be toxic to non-target species;

Recommended spray buffer zones to protect non-target terrestrial and aquatic habitats from unintended exposure; and,

Precautionary statements to reduce the potential for run off of glyphosate to adjacent aquatic habitats, particularly when heavy rain is forecasted. This includes a recommendation to keep a strip of vegetation between the treatment area and the edge of a water body to reduce runoff of glyphosate to aquatic areas.

http://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2015/52865a-eng.php

Tue Mar 31, 2015 4:07pm EDT Related: ENVIRONMENT, REGULATORY NEWS, BREAKINGVIEWS EPA will require weed-resistance restrictions on glyphosate herbicide BY CAREY GILLAM

The Environmental Protection Agency confirmed it will require a weed resistance management plan for glyphosate,

At least 14 weed species and biotypes in the United States have developed glyphosate resistance, affecting more than 60 million acres of U.S. farmland

The EPA's weed management plan will not address human health concerns,

By Elizabeth Grossman, National Geographic PUBLISHED APRIL 23, 2015

What Do We Really Know About Roundup Weed Killer?

http://news.nationalgeographic.com/2015/04/150422-glyphosate-roundup-herbicide-weeds/

The EPA is reviewing its approved uses of glyphosate and expects to release a preliminary assessment of the human health risk later this year. This is expected to include new restrictions.

El Salvador also passed legislation to ban dozens of agrochemicals including glyphosate last year, but it has yet to be signed into law.

Brazil looks to ban Monsanto's Roundup, other toxicity risks

Published time: March 27, 2014 22:20

http://rt.com/news/brazil-roundup-monsanto-ban-721/

Brazil's public prosecutor wants to suspend use of glyphosate, the active ingredient in Monsanto's pervasive herbicide Roundup.

Sweet victory for Mexico beekeepers as Monsanto loses GM permit

http://www.theguardian.com/global-development/poverty-matters/2014/aug/08/sweet-victory-beekeepers-monsanto-gm-soybeans

the Guardian, US Edition

A district judge in the state of Yucatán last month overturned a permit issued to Monsanto by Mexico's agriculture ministry, Sagarpa, and environmental protection agency, Semarnat, in June 2012 that allowed commercial planting of Roundup-ready soybeans.

he concerns are multiple. Roundup-ready crops – soybeans, corn, canola, sugar beets, cotton and alfalfa – have been manipulated to be resistant to glyphosate, the active ingredient in Roundup.

Some argue that glyphosate poses a risk to human and animal health, a claim that Monsanto and other agribusinesses reject.

In addition to health risks, environmental damage to soil, water and bee colonies – which are dwindling fast – have been attributed glyphosate use, threatening food and water security across the globe

Sri Lanka lifts ban on sale of glyphosate

Tue, May 13, 2014, 12:13 am SL Time, ColomboPage News Desk, Sri Lanka.

http://www.colombopage.com/archive 14A/May13 1399920230CH.php

May 12, Colombo: Sri Lanka's Department of Agriculture announced yesterday that it has officially lifted the ban on glyphosate with the Registrar of Pesticides as no justifiable reason has been found to impose a ban.

Sri Lanka in March this year banned the sale of Monsanto's "Round Up" glyphosate weedicide after a study found that the weedicide is responsible for the increasing number of chronic kidney disease patients.

The decision to ban the weedicide sale was based on a directive of the President Mahinda Rajapaksa, who appointed a committee to look into the chronic kidney disease of unknown etiology (CKDu).

The research study conducted by Dr. Channa Jayasumana of the Rajarata University found that while the weedicide itself is not nephrotoxic, when it combines with hard ground water containing metals such as cadmium and arsenic, either naturally present in the soil or added through fertilizer, glyphosate becomes extremely toxic to the kidney.

However, since then the validity of Dr. Jayasumana's research had come under question as the manufacturer Monsanto and other agrochemical producers have raised objections to the findings saying that there is no evidence to suggest the conclusion that glyphosate is responsible for CKDu.